crushed ore, called olivine. The entire facility will constitute the Medical Division's whole-body counter, capable of measuring minute amounts of radioactive material in patients' bodies, not usually detectable because of interference from natural radiation in the atmosphere, earth, and building materials.

The steel chamber was fabricated from metal manufactured prior to 1945, because steel manufactured after that year contains traces of radioactive fallout that would impair the low-background characteristics of the counter. The concrete housing around the steel box is also formed from material with low-activity constituents.

The crushed olivine ore surrounding the structure is a geological rarity. It is a pale green mineral mined near Waynesville, N. C., formed deep inside the earth and extruded up through the earth's crust, and has the unusual property of being nearly free of the usual radioactive contaminants found in local rock such as potassium, radium, thorium, and uranium.

When completed, the whole-body counter will be able to measure low-level radiation from a patient's body with minimum distortion or "static" from other radioactivity in the area.

The new facility will permit clinical investigations with radioactive tracers in amounts that are a small fraction of the already low doses now used in diagnostic procedures. It will be used to study normal metabolic processes through the use of biological compounds labeled with radioactive tracers, and to study a variety of disorders by evaluating turnover rates and patterns of such compounds. It is expected that the Institute facility will represent a significant contribution in the design of whole-body counters in its ability to measure normal bodily radioactivity at low levels matched by few, if any, research centers in this country.

The 60-ton box arrived at Southern Railway's Blair Station, near the Oak Ridge Gaseous Diffusion Plant.

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